



July 29, 2020

Regional Administrator
Air and Radiation Division
U.S. Environmental Protection Agency, Region 5 (A-18J)
77 West Jackson Boulevard
Chicago, IL 60604

**Re: ArcelorMittal Minorca Mine
Semiannual Compliance Report for the 1st Half of 2020
Federal Implementation Plan for Regional Haze (FIP)**

On behalf of ArcelorMittal Minorca Mine (Minorca), I am submitting the enclosed Semiannual Compliance Report for the Excess Emissions and Monitoring System Performance Reports for the 1st Half of 2020 as required by 40 CFR 52.1235(e)(5-6).

It should be noted that while the continuous NOx and SO₂ emissions monitoring requirements of the FIP are in effect, Minorca is not yet subject to the NOx emission limitation specified by 40 CFR 52.1235(b)(1)(v). 40 CFR 52.1235(b)(1)(v)(A) specifies that the NOx limitation will become enforceable "...55 months after May 12, 2016 and only after EPA's confirmation or modification of the emission limit...", which has not yet occurred.

Minorca has also submitted the quarterly CEMS reports required by 40 CFR 52.1235(e)(7) on July 29, 2020. Some information specified within this report may refer you to this quarterly CEMS report and the previous CEMS report for the first quarter of 2020 submitted April 28, 2020 for additional details.

Minorca submitted a revision of the 38.16 lb SO₂/hr on a 30-day rolling average limit in accordance with 40 CFR 52.1235(b)(2)(v) on April 6, 2018. That section of the FIP provides that Minorca "may calculate a revised SO₂ limit based on one year of hourly CEMS emissions data reported in lbs SO₂/hr and submit such limit, calculations, and CEMS data to EPA." This provision to modify the SO₂ limit exists because EPA recognized that the initial SO₂ limit was based on "limited stack test data" (78 Fed. Reg. 8718) and did not reflect the variability of Minorca's operations. The revised emission limit calculation methodology follows the provisions of 40 CFR 52.1235(b)(2)(v) and results in an updated emission limit of 58.64 lbs SO₂/hr based on a 30-day rolling average (prior to adjusting to account for operating levels of the Minorca furnace which were less than capacity during the data collection period). Adjusting to reflect the emissions associated with operation of the furnace at capacity using the above equation results in a limit of 73.79 lbs SO₂/hr based on a 30-day rolling average. The revised limit became effective on the April 6, 2018 date of submittal of the limit revision package.

Please contact Jaime Johnson, Minorca's Environmental Manager, at (218) 305-3337 should you have any questions or comments regarding this report.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robb Peterson".

Robb Peterson
Operations Manager

Enclosed: Semiannual Compliance Report for the Regional Haze FIP covering the 1st Half of 2020

CC: Jaime Johnson (ArcelorMittal Minorca Mine Inc.)
 Rich Zavoda (ArcelorMittal USA)

40 CFR 52 Subpart Y
Approval and Promulgation of Implementation Plans - Minnesota

52.1235 – Regional Haze

Semi-Annual Report (52.1235(e)(5)-(6))

Company Name (52.1235(e)(6)(i)): ArcelorMittal Minorca Mine Inc.		Beginning date of reporting period (52.1235(e)(6)(iii)): 1/1/2020
Company Address: 5950 Old Highway 53 North P.O. Box 1 Virginia, MN 55792		Ending date of reporting period (52.1235(e)(6)(iii)): 6/30/2020
Person to Contact Regarding Submittal: Jaime Johnson	Mailing Address: Same as above	Telephone No: 218-305-3337
Identification of the process unit, control devices, and CEMS covered by the compliance report. (52.1235(e)(6)(iv)):		
Process Unit: <ul style="list-style-type: none">• Indurating Furnace (EU 026)		
Control Devices: <ul style="list-style-type: none">• Venturi Scrubbers (CE 014, CE 015, CE 016 and CE 017)		
CEMS: <ul style="list-style-type: none">• SO₂ CEMS (EU026-SO₂)• NOx CEMS (EU026-NOx)		
Attachments		
A	Records of Startups and Shutdowns (52.1235(e)(6)(v))	
B	Records of Malfunctions (52.1235(e)(6)(vi))	
C	Deviations (52.1235(e)(6)(vi)) <ul style="list-style-type: none">• Emissions in Excess of Applicable Emission Standards• Deviations of Requirement to Continuously Operate Emissions Control Device• Deviations of Requirement to Continuously Operate CEMS• Deviations for Failure to Maintain Records or Submit Reports	
Certification		
Name, Title and Signature of Responsible Official Who is Certifying the Truth, Accuracy and Completeness of the content of the Report (52.1235(e)(6)(ii)): I certify, based on information and belief formed after reasonable inquiry, that the statements and information in this document are true, accurate, and complete.		
Signature: 	Date of report: 7/29/20	
Printed Name: Robb Peterson	Title: Operations Manager	

Table A
Records of Startups and Shutdowns (52.1235(e)(6)(v))

ID#	Description	Startup or Shutdown	Start	End	Actions Taken to Minimize or Eliminate Emissions	Consistent with SSM Plan?
EU 026	Indurating Machine	Shutdown	2/3/2020 11:07	2/3/2020 11:56	Scrubbers were operated in compliance with parametric limits until pellet feed to the furnace stopped and natural gas fuel combustion ceased.	Y
		Startup	2/3/2020 13:12	2/3/2020 03:44	Scrubbers were never fully shut down during the furnace shutdown. The furnace was relit and the pellet bed started up following a warm-up period for the furnace.	Y
		Shutdown	4/20/2020 06:04	4/20/2020 07:35	Scrubbers were operated in compliance with parametric limits until pellet feed to the furnace stopped and natural gas fuel combustion ceased.	Y
		Startup	4/24/2020 19:45	4/26/2020 07:04	Scrubbers were started up prior to the furnace being lit and fuel being combusted. There were no exceedances of the SO ₂ emission limitation.	Y
		Shutdown	5/7/2020 08:44	5/7/2020 09:29	Scrubbers were operated in compliance with parametric limits until pellet feed to the furnace stopped and natural gas fuel combustion ceased.	Y
		Startup	5/7/2020 09:58	5/7/2020 11:49	Scrubbers were never fully shut down during the furnace shutdown. The furnace was relit and the pellet bed started up following a warm-up period for the furnace.	Y
		Shutdown	4/20/2020 07:45	4/20/2020 09:30	Scrubbers were operated in compliance with parametric limits until furnace pellet bed stopped and fuel combustion ceased.	Y
		Startup	4/24/2020 16:00	4/24/2020 20:15	Scrubbers were started up prior to the furnace being lit and fuel being combusted. There were no exceedances of the SO ₂ emission limitation.	Y
CE 014	Indurating Machine Scrubber A Low Efficiency SO ₂ Scrubber	Shutdown	4/20/2020 08:00	4/20/2020 08:45	Scrubbers were operated in compliance with parametric limits until furnace pellet bed stopped and fuel combustion ceased.	Y
		Startup	4/24/2020 16:00	4/24/2020 20:15	Scrubbers were started up prior to the furnace being lit and fuel being combusted. There were no exceedances of the SO ₂ emission limitation.	Y
CE 015	Indurating Machine Scrubber B Low Efficiency SO ₂ Scrubber	Shutdown	4/20/2020 07:45	4/20/2020 09:15	Scrubbers were operated in compliance with parametric limits until furnace pellet bed stopped and fuel combustion ceased.	Y
		Startup	4/24/2020 16:00	4/24/2020 20:15	Scrubbers were started up prior to the furnace being lit and fuel being combusted. There were no exceedances of the SO ₂ emission limitation.	Y
CE 016	Indurating Machine Scrubber C Low Efficiency SO ₂ Scrubber	Shutdown	4/20/2020 07:45	4/20/2020 09:15	Scrubbers were operated in compliance with parametric limits until furnace pellet bed stopped and fuel combustion ceased.	Y
		Startup	4/24/2020 16:00	4/24/2020 20:15	Scrubbers were started up prior to the furnace being lit and fuel being combusted. There were no exceedances of the SO ₂ emission limitation.	Y
CE 017	Indurating Machine Scrubber D Low Efficiency SO ₂ Scrubber	Shutdown	4/20/2020 07:45	4/20/2020 08:45	Scrubbers were operated in compliance with parametric limits until furnace pellet bed stopped and fuel combustion ceased.	Y
		Startup	4/24/2020 16:00	4/24/2020 20:15	Scrubbers were started up prior to the furnace being lit and fuel being combusted. There were no exceedances of the SO ₂ emission limitation.	Y

Table A
Records of Startups and Shutdowns (52.1235(e)(6)(v))

ID#	Description	Startup or Shutdown	Start	End	Actions Taken to Minimize or Eliminate Emissions	Consistent with SSM Plan?
EU026 SO ₂	Indurating Furnace CEMS: • SO ₂ CEMS	N/A	N/A	N/A	The CEMS operated continuously while the furnace was in operation (combusting natural gas) except for the periods specified within the quarterly excess emissions and monitoring system performance reports required by 52.1235(e)(7).	N/A
EU026 NO _x						

Table B
Records of Malfunctions (52.1235(e)(6)(v))

CE / GP	CE Description	Source Operating Time (days)	Parameter	Operating Limit	Value During Malfunction	Malfunction Dates	Malfunction Category (days)			Actions Taken to Minimize or Eliminate Emissions
							Start	End	Total Time (days)	
CE 014	Indurating Machine Scrubber A	179	dP	≥ 1.8 in H2O	---	---	---	---	---	---
CE 014	Indurating Machine Scrubber A	179	Water Flow	≥ 803 gpm	---	---	---	---	---	0 0.0%
CE 015	Indurating Machine Scrubber B	179	dP	≥ 2.2 in H2O	---	---	---	---	---	0 0.0%
CE 015	Indurating Machine Scrubber B	179	Water Flow	≥ 814 gpm	---	---	---	---	---	0 0.0%
CE 016	Indurating Machine Scrubber C	179	dP	≥ 1.9 in H2O	---	---	---	---	---	0 0.0%
CE 016	Indurating Machine Scrubber C	179	Water Flow	≥ 795 gpm	---	---	---	---	---	0 0.0%
CE 017	Indurating Machine Scrubber D	179	dP	≥ 1.8 in H2O	---	---	---	---	---	0 0.0%
CE 017	Indurating Machine Scrubber D	179	Water Flow	≥ 847 gpm	---	---	---	---	---	0 0.0%
EU026 SO ₂ EU026 NO _x	Indurating Furnace CEMS: • SO _x CEMS • NO _x CEMS	179	CEMS Uptime	---	---	---	---	---	---	The CEMS operated continuously except for the periods specified within the quarterly excess emissions and monitoring system performance reports required by 52.1235(e)(7).

Table C Deviations (52.1235(e)(6)(vii))			
	Deviation Type	Description	Action to Address Deviation
Excess Emissions	Continuous Operation of Pollution Control Equipment	Maintaining Records or Submitting Reports	Action to Avoid a Reoccurrence
		Cause(s)	

There were no identified deviations from the requirements of 52.1235 within the reporting period covered by this report.